



#### THEMATIC DISCUSSION: CREATIVE PARTNERING TO ENHANCE SUSTAINABLE **DEVELOPMENT AND CONSERVATION IN SIDS**

CSD-16 Partnerships Fair closing thematic session discusses "Creative partnering to enhance sustainable development and conservation in SIDS". (L-R): Erik Hagberg, PAC RMI Inc; Dr. Tom Goreau, Global Coral Reef Alliance; Diane Quarless (Chair), Chief of the SIDS unit; Dr. Rolph Payet, Global Island Partnership (GLISPA).

Diane Quarless, Chief of the DSD SIDS Unit opened the CSD-16 Partnerships Fair closing thematic session by highlighting the focus of the session, which aimed to discuss ways to address creative partnering to enhance sustainable development and conservation in Small Island Developing States (SIDS).

Beginning his presentation, Erik Hagberg outlined PAC RMI Inc, which is an aquaculture business enterprise, working mainly in the Marshall Islands, and operating as a resident domestic corporation of the Republic of the Marshall Islands. Concretely, PAC RMI Inc carries out the sustainable farming of sea cucumbers in the Marshall Islands and other SIDS, and has witnessed interest in this area of work grow over recent years.

Introducing, El Terra, a resident of the Marshall Islands, and the first Marshalli CEO for the PAC RMI's partners, Mr. Hagberg noted that last year, PAC RMI Inc openly stated that they wished to have a Marshalli CEO in five years. This had been achieved three years earlier with the appointment of El Terra. Mr. Hagberg explained that while many residents of the Marshall Islands are aware of the high value of their local natural resources, he believed that they were not motivated and lacked the social capital to utilize their asset. In this regard, PAC RMI Inc provided the infrastructure and know-how, and has created a partnership which harnesses the local knowledge of the local Marshallis. Key to the success of this partnership, has been the involvement of the local government, and landowners partners, which lend legitimacy to the initiative.

#### Inside Partnerships WIRE

THEMATIC DISCUSSION
- Creative partnering to
enhance sustainable
development and
conservation in SIDS

Partnership	5
Presentations	

Words of appreciation and feedback

Information Desks

Key points highlighted during the session





Erik Hagberg (left), of PAC RMI Inc., makes his presentation on "Sustainable Sea Cucumber Aquaculture in the Marshall Islands and SIDS".

Highlighting how the partnership works, Mr. Hagberg emphasized the importance of the Marshallis having cooperative ownership. He stressed that in making the locals shareholders, and creating a stock ownership programme, thus linking the work to a direct financial mechanism, they have become incentivised, proactive, and have worked very hard to sustain production. This has contributed to increased company profits, and also a decline in illegal fishing, as many of the locals now work or have family members/ friends working for PAC RMI Inc. Mr. Hagberg informed participants of how PAC RMI Inc operate in the collection of sea cucumbers, stressing the use of local technology transfer, and human labour.

Six atolls and Iroij in the Marshall Islands have the largest sea cucumber farms by area in the world

Erik Hagberg

Sea cucumbers have various properties and are considered valuable in monetary and non-monetary terms. Table 1 documents why sea cucumbers should be preserved and protected. Mr. Hagberg followed by outlining the financial viability of the sea cucumber trade, which is worth \$250,000,000 per year. PAC RMI Inc. ensured that the production is environmentally sustainable by pursuing specific environmentally sensitive farming strategies, and maintaining adherence to a resource management plan.

Sea cucumber production takes place in various SIDS and other regions. Currently, six atolls and Iroij in the Marshall Islands have the largest sea cucumber farms by area in the world, namely, over 1,123 mi<sup>2</sup>. This contrasts with the size and production of the Dailan Province, in China which was considered the largest sea cucumber farming region, in 2003, and occupied namely, 30 mi<sup>2</sup>.

#### Table 1: Important reasons why sea cucumbers should be protected, Eric Hagberg

- Food Security
  - Very High in Protein
- Valuable Asian Delicacy for thousands of years
  - Huge existing demand for dried sea cucumber
  - Anti-Arthritic and **Aphrodisiac**
- Anti-viral and Anti-Bacterial
  - Component in patented HIV/ AIDS treatment
- Showing success in fighting Cancer
  - Indications of slowing spread of cancer e.g. Breast Cancer
- A supplement promoting health and virility.

Commenting on the growth of the sea cucumber trade, Mr. Hagberg noted recent research had documented that sea cucumbers are now known to contain useful bio-pharmaceutical components. Given this new development, there is potential for the sea cucumber trade to improve the socio-economic situation for the Marshallis in the short and long term. Finishing his presentation, Mr. Hagberg highlighted some benefits of working for PAC RMI Inc, viewed from a Marshalli perspective. Training in sea cucumber collection takes only 15 minutes, the equipment required is low-tech, and locally built canoes are encouraged over expensive boats. For the community the short and long term benefits of collecting sea cucumbers are considerable, and important on an island that has few alternative forms of trading.





Dr. Rolph Payet (right), representing the Global Island Partnership (GLISPA) makes his presentation on partnerships working in the Seychelles.

**Dr. Rolph Payet**, of the Global Island Partnership (GLISPA) opened his presentation by highlighting the importance of the Convention on Biological Diversity and the specific 2010 biodiversity target. He noted that countries need to implement a more effective natural resource management strategy, especially Small Island Developing States (SIDS) and commented that more emphasis should be placed on investing in protective areas.

Discussing partnerships in the Seychelles, Dr. Payet highlighted how the Government of the Seychelles and the Hilton International had worked together to pursue sustainable tourism. Three years ago, the Hilton International submitted a proposal to build a hotel in the North Island, in the Seychelles.

At the time, the Seychelles had instituted a policy that prohibited skyscrapers, and only promoted small-scale forms of accommodation that would blend with the environment. Accepting this policy, the Hilton International later submitted a reformulated design, adhering to the wishes of the Seychelles government to preserve the beauty of the landscape, and promote sustainable development. Subsequently, a small structure was built on North Island, providing 12 exclusive rooms at \$2,000 per night. In response to this investment, North Island was transformed, the population of predators such as rats was removed, resulting in the rehabilitation of rare birds, flora and fauna. Dr. Payet ended by stressing that this case study highlighted that embedding sustainable development is possible and can lead to social, environmental and economic benefits for

**Strong** leadership is needed to transform sustainable development principles into policies

Dr. Rolph Payet

the community. He noted that the builders of the hotel structure used local materials, yet opined that is was difficult at times to engage the local fishermen, hence, a commitment on all parties to resolved these challenges and come up with a mutually beneficial solution was employed. Dr. Payet stressed that it is important for countries to value their environment, and ensure that sustainable development is integral to the development plans in SIDS. He offered some lessons learned, which are found in Table 2.

Dr. Payet finished his presentation by highlighting the problems associated with the management of coastal resources. He informed participants that new technologies are being used as an enforcement tool in the fight against poaching.

#### Table 2: Lessons Learned, Dr. Payet

- Ground rules need to be put in place when establishing partnerships;
- Rules are important to prevent freerising;
- Strong leadership needed transform sustainable development principles into policies;
- New technology should be explored as an enforcement tool against poaching.





Dr. Tom Goreau, (left) from the Global Coral Reef Alliance representing SIDS partnership: Implementation of New Technologies for Sustainable Development.

Dr. Tom Goreau, President of the Global Coral Reef Alliance, which is one of the partners of the SIDS partnership: Implementation of New Technologies for Sustainable Development, began his presentation partnerships for sustainable "Implementing management in island nations" by stressing that there are many solutions to major problems of sustainable energy, waste recycling into useful energy and materials, restoration of ecosystems, more productive and sustainable agriculture and mariculture, and carbon sequestration. However, these solutions are not often pursued by international policy-makers.

He lamented that the main barrier to their success has been, and continues to be, the lack of funding for endogenous capacity development, noting that technology developments are flourishing.

Habitat restoration requires dedicated funding streams

Dr. Tom Goreau

Turning to the Biorock project, Dr. Goreau outlined the focus of his work which is coral reef preservation, the growth of coral reefs, fish restoration, especially juveniles, which added together, are all positive attempts to maintain an ecosystem. He informed participants that currently the project in Indonesia and the Philippines employs villagers and local fisherman, who have been receptive to learning how to preserve coral reefs and habitat restoration using biorock technology.

While the project has been successful in uptake and interest from the local community, it has been challenged by the lack of consistent funding and access to knowledge. Dr. Goreau lamented that the lack of capital was impeding the progress of the project, which is unfortunate given than in the Philippines, in particular, the project works with children and informs them of the difference between a healthy and dying coral reef.

Similarly, in Bali, the partnership was able to restore a coral reef, declare it a protected area and train 20 subsistence fishermen how to preserve a coral reef. Importantly, the work of the partnership draws on the village management set-up in order to mesh with the existing governance structure, foster better engagement from the local community.

Dr. Goreau informed participants of the various partners in the partnership, which brings together organisations from the local, national, international, and private and non-profit sectors, noting that it was important to have a local actor in the partnership. Local actors are often the people that have a memory of the coral reef and therefore, are aware when it is damaged. Comparing SIDS, Dr. Goreau remarked that a tradition of preserving coral reefs has been maintained in the Pacific region, in contrast to the Caribbean SIDS. He informed participants of the Coral Reef Alliance's work in St. Martin and Trinidad and Tobago, and stressed the need for more coral reef restoration and preservation projects in the eastern Caribbean islands.



### **Partnerships Presentations**



Representatives of the SIDS Partnership: Implementation of New Technologies for Sustainable Development. (L-R) Gilles Lecaillon, Erik Hagberg, Dr. Tom Goreau, J. Nilsson.

The presentation of the SIDS Partnership: Implementation of New Technologies for Sustainable Development in the morning of 12 May, was opened by Mr. J. Nilsson representing EFRIDA and E-Genesis Industries, who talked about agricultural applications for biomass Pyrolysis to increase agricultural yields in crops such as soybeans, corn and potatoes by using bio-charcoal in the soil. Carbon can be sequestered in plant biomass. Unfortunately, in 10 to 20 years, most of the biomass will decompose and release the carbon dioxide back to the atmosphere. However, if the biomass is converted to charcoal, it is extremely stable. Buried in the soil, it can have a live of a 1000 years. He stressed that now we have a pathway for carbon dioxide to go into more

permanent storage with added economic benefits, which include increase crop performance, energy production and soil carbon sequestration. Controlled pyrolysis has recently been approved by the UN as a Clean Development Mechanism for avoidance of methane production for biomass decay.

Mr. Guilles Lecaillon from ECOCEAN CEO—France, described the process of Post-larval capture and culture (PCC) as an innovative technology for the sustainable use of marine resources. The concept is based on the biological life cycle of the majority of marine animals, mainly coastal fish and crustaceans, where more than 95% of colonizing post-larvae disappear within a week of reef settlement. PCC captures only a small percentage of post-larvae (PL) from amongst a huge number of incoming PL and never uses juveniles or adults. It has minimal impact on the habitat since no chemicals are used in capturing and floating traps are located far

Value of biochar:
high stability,
increased soil
fertility and nutrient retention,
absorbs pesticides and carbon
sequestration

Mr. J. Nilsson

from the reef. The process uses a variety of existing collection gears that are suitable for use in PCC; fishermen from the islands are totally involved in the collection of sam-

ples who employ small wooden or traditionally-made boats; capacity building is fast and easy as PCC is a fishing based-activity. Thus, PCC offers less negative impact on fish-stocks, higher survival rates and significant steps to deliver a more saleable fish, since it uses manual sorting, easy weaning and rapid rearing. PCC multi-species stocks can be used in marine aquarium fish production (aquarioculture), tropical food fish production (aquaculture) as well as restocking associated with habitat restoration such as biorock. However, Mr. Lecaillon indicated, even though diffusion of this innovative technique is feasible, it requires the participation of Government agencies, scientists, local communities, the marine aquarium trade and ultimately consumers (tourists and aquarists).

Dr. Tom Goreau and Mr. Erik Hagberg also made presentations in this session. For a summary of their work, please refer to the previous pages related to the thematic discussion on creative partnering in SIDS.



### **Partnerships Presentations**



Dr. Helen Marguard, Executive Director of the SEED Initiative introducing the partnership.



Heather Creech, presenting the work of the IISD on The SEED Initiative winners.

**SEED** awards are designed to support innovative, entrepreneurial partnerships

Dr. Helen Marquard

Dr. Helen Marquard, Executive Director of The SEED Initiative, opened the presentation by describing the objectives of the partnership and updating CSD participants on the selection process of the 2008 SEED Awards finalists. The SEED Initiative, which was founded by UNEP, UNDP and IUCN at the World Summit on Sustainable Development, aims at inspiring and supporting exceptional, entrepreneurial, nascent, multistakeholder partnerships in the developing world. The initiative believes that social entrepreneurs, communities, companies and others, working together in multi-stakeholder partnerships at a local level can have a tremendously positive impact, delivering outcomes that no single actor could achieve alone. Strong local ownership means that activities are more suited to local circumstance, increasing the chances for longlasting success and greater impact. SEED holds an annual global competition and conducts research to determine the main factors for success, for scale-up and for replication.

Dr. Marquard informed the audience that The SEED Awards for Entrepreneurship in Sustainable Development are designed to support innovative, entrepreneurial partnerships in developing countries which have the potential to make real improvements in poverty eradication and environmental sustainability. They aim to assist young and promising initiatives in strengthening and scaling up the impact of their activities. The Award is not a monetary price, but consists of a comprehensive package of tailormade support services. The five 2008 winners, who will be announced in June 2008, are chosen from 15 finalists out of a pool of hundreds of projects submitted for consideration.

Ms. Heather Creech, representing the International Institute for Sustainable Development (IISD), offered an overview of the research being conducted by the Institute on lessons learned from the experiences of the 2005 and 2007 SEED winners. The research focuses on three main variables, such as critical success factors, measuring progress and scaling up impact. The Institute has developed a research methodology which includes academic and practitioner literature reviews, interviews with other similar award programs and pre/post award analysis of SEED winners. It has also included interviews with the lead proponents and the partners of the 2008 finalists.



Dr. August of Kemitraan Air Indonesia opened his presentation on behalf of the Global Water Partnership by providing some history on Indonesia's decision to prioritize water resource management. In 1999, the government, realizing the importance of water management, imposed an Integrated Water Resource Management (IWRM) Reform Bill, three years before the World Summit on Sustainable Development, that created Article 26, which focuses on water efficiency.

The Reform Bill led to the introduction of the Water Resource Law (No. 7/2004), and subsequent national IWRM projects. With support from the United States of America, Department of



Dr. August of Kemitraan Air Indonesia made his presentation on behalf of the Global Water Partnership.

IWRM, a water efficiency planning was implemented, and consequently, a partnership developed with the Global Water Partnership.

Several multistakeholder dialogue meetings were planned for the IWRM projects. Each dialogue meeting had a specific objective, namely; the first round would discuss management functions, and perform an inventory of issues; the second round would tackle competencies and complete an inventory of institutional functions, and the third would ensure that a draft of the IWRM and water efficiency plan was developed.

Seeking to understand the true "state of play", the IWRM project team created

Governments should consider embedding **IWRM** and Water Efficiency into their development strategies.

**Global Water Partnership** 

a questionnaire that was sent to all stakeholders. The questionnaire was thorough, and sought feedback on all critical areas within water management, including; water conservation, utilization, and water related disaster management. It also asked penetrating questions on participation and levels of empowerment of the local community, in addition to, the level of private sector involvement. Each dialogue meeting presented the IWRM project team with recommendations, which would later support the policy, regulation and financing decisions. Another positive output was that stakeholders became more interested in water conservation, following the meetings.

To ensure that the IWRM project was inclusive and addressed the needs of all stakeholders, a range of participants were invited to the meetings, including; farmers, professors, and representatives from the forestry, fisheries and agricultural industries. Ending with some lessons learned, Dr. August remarked that the Indonesian Government found that the population had high expectations regarding Water Resource Management. Therefore, he summarized, by stressing the importance of governments to address IWRM and water efficiency, as this is critical to the lives and livelihoods of a countries' population.



### Words of appreciation and feedback

This edition of the Partnership Wire commemorates the closing session of the CSD 16 Partnerships Fair activities. As Head of the Partnerships Team, I would like to take this opportunity to express the deep appreciation of the CSD Partnerships Team for the valuable participation of all distinguished panelists in our interactive discussion sessions, at the partnerships presentations and the partnerships representatives at the information desks. Special words of gratitude should also be extended to the trainers and organizations sponsoring the training sessions, which elicited a significant amount of interest from CSD participants. We sincerely praise the tireless commitment and enduring enthusiasm of the CSD Partnerships partners and practitioners as well as the tangible contributions to the implementation of sustainable development that these innovative initiatives are making. I would also like to pay tribute and express my appreciation to the CSD participants that attended our sessions playing a vibrant and significant role in generating a meaningful exchange of views and ideas. The constructive dialogue generated greatly contributed to enhance our knowledge of the challenges, lessons learned and best practices of partnering to implement sustainable development. We look forward to your participation in CSD- 17!.

As the CSD Secretariat continues to work on improving its on-line services, including the CSD Partnerships website features and the database functions, to facilitate the consideration of partnerships in CSD discussions as well as highlight the innovative contributions of CSD partnerships, we would like to encourage you to send us your feedback in order to improve the quality of our services. Please feel free to send your comments to beyondwssd@un.org

Patricia Chaves Head of the Partnerships Team, CSD Secretariat

#### The following partnerships had an Information Desk at the Partnerships Fair, CSD-16

- Northern Water Network
- Global Water Partnership
- Partners for Water and Sanitation (Paws)
- ♦ Water Programme for Environmental Sustainability (WPA II)

Participation up-date: 51 participants attended today's thematic discussion

#### Partnerships WIRE

was published by the CSD Partnerships Team for the Partnerships Fair, CSD-16

#### **Editors:**

- Patricia Chaves, Senior Sustainable Development Officer, DSD
- Désirée Abrahams, Associate Sustainable Development Officer, DSD

#### Contributors:

- Yolanda Salazar, DSD
- Antonia Hjort, DSD

**Tel:** +1 917 367 2089/ 4254 **Fax:** +1 917 367 2341 **E-mail:** beyondwssd@un.org

**Web:** www.un.org/esa/sustdev/partnerships

#### Key points highlighted during the discussion session

- Sea cucumbers have various properties and are considered valuable in monetary and non-monetary terms as well as be known to contain useful bio-pharmaceutical components;
- SIDS need to consider more effective natural resource management strategies;
- SIDS governments should place more emphasis on investing in protective areas;
- Ground rules need to be put in place when establishing partnerships;
- Rules are important to prevent free-rising;
- ◆ Strong leadership is needed to transform sustainable development principles into policies;
- Even though technology developments are flourishing, they have been challenged by the lack of consistent funding and access to knowledge.